In the Claims:

Please amend the claims as follows:

1-33 (cancelled)

34. (currently amended) A method for a cardiac analysis, the method comprising:

acquiring an ECG-signal;

detecting at least one wave of the ECG-signal; and

calculating parameter values of said wave, wherein said wave is a P-wave excluding atrial extrasystoles,

whereupon the cardiac analysis is focused ~~to~~ on dynamic changes of the configuration of the P-wave, wherein substantially every detected P-wave is compared to a reference P-wave of the ECG signal in a defined time period.

35. (currently amended) The method according to claim 34, wherein the cardiac analysis is also focused ~~also to~~ on dynamic changes of ~~the~~ a PQ-segment.

36. (currently amended) The method according to claim 34, wherein the ECG-signal is ~~in the form of~~ a vectorcardiogram.

37. (currently amended) The method according to claim 34, wherein a beat between two R-peaks is examined, whereupon said beat is classified into groups depending on whether the

beat is having a duration between the ~~predetermined~~ defined time ~~limit~~ period or the beat is having a duration under the ~~predetermined~~ defined time ~~limit~~ period, whereupon both said beats are analyzed separately.

38. (previously presented) The method according to claim 34, wherein the P-wave is detected by a template method.

39. (previously presented) The method according to claim 34, wherein the P-wave is detected by a pattern recognition method.

40. (previously presented) The method according to claim 34, wherein the detected P-wave is stored in X, Y, Z leads.

41. (currently amended) The method according to claim 34, wherein the detected P-wave is averaged in the ~~predetermined~~ defined time ~~limit~~ period.

42. (currently amended) The method according to claim 41, wherein at least one averaged P-wave is used as an initial reference P-wave, where ~~the~~ upcoming averaged P-waves are compared to the initial reference P-wave.

43. (previously presented) The method according to claim 34, wherein at least one loop of the P-wave is detected.

44. (currently amended) The method according to claim 34, wherein the ~~parameters~~ parameter values of the P-wave in a one-dimensional diagram are one or more of the following: ~~the~~ a vector area, vector change area, P-area duplicity, PQ-vector magnitude, PQ-area and PQ change area.

45. (currently amended) The method according to claim 34, wherein the ~~parameters~~ parameter values of the P-wave in a two-dimensional diagram are one or more of the following: ~~the~~ a vector loop area, vector change loop area and P loop area duplicity.

46. (currently amended) The method according to claim 34, wherein the ~~parameters~~ parameter values of the P-wave in a three-dimensional diagram are one or more of the following: ~~the~~ a vector loop area, ~~the~~ a vector change loop area, ~~the~~ angles of the ~~azimun~~ azimuth, ~~the~~ an elevation, change vector, ~~the~~ a P-QRS vector as well as ~~the~~ a vector magnitude, change vector magnitude.

47. (currently amended) The method according to claim 34, wherein the ~~parameters~~ parameter values of the P-wave in a magnitude environment are one or more of the following: ~~the~~ a vector magnitude area, ~~the~~ a vector change magnitude area difference and ~~the~~ a vector magnitude.

48. (currently amended) The method according to claim 34, ~~wherein the method comprises also the calculations of~~ further comprising:

calculating one or more of the following: ~~the~~ a PQ-time, P-wave duration (P-dur), ~~the~~ a

length of the P-wave, ~~the~~ a velocity of ~~the~~ a P-wave vector loop.

49. (previously presented) The method according to claim 34, wherein the ECG-signal is acquired from a Frank system or a 12-lead ECG-arrangement.

50. (currently amended) The method according to claim 34, further comprising:

registering electrical signals of the heart in ~~wherein the ECG-signal is acquired from a~~ an independent data storage unit; and ~~that is independent of this invention and commercially available~~

acquiring the ECG signal from said data storage unit.

51. (currently amended) The method according to claim 34, wherein results of the ~~parameters~~ parameter values are displayed in a trend curve.

52. (currently amended) A cardiac analysis system, comprising:

first means for acquiring the ECG-signal;

second means for detecting at least one wave from the ECG-signal;

third means for calculating parameter values of said wave, wherein said wave is a P-wave excluding atrial extrasystoles, whereupon the cardiac analysis system is adapted to focus to dynamic changes of the configuration of the P-wave; and

means for comparing substantially every detected P-wave to a reference P-wave of the ECG signal in a defined time period.

53. (currently amended) The system according to claim 52, ~~being~~ wherein the system is further adapted to focus ~~to~~ on dynamic changes of ~~the~~ a PQ-segment.

54. (currently amended) The system according to claim 52, wherein the ECG-signal is in a form of a vectorcardiogram.

55. (currently amended) The system according to claim 52, ~~being also~~ the system is further adapted to measure a duration of ~~the~~ a beat between two R-peaks, wherein the system is also configured to compare the beat to the ~~predetermined~~ defined time ~~limit~~ period and classified the beat into ~~the~~ one of two groups depending on whether the duration is between the ~~predetermined~~ defined time ~~limit~~ period or under the ~~predetermined~~ defined time ~~limit~~ period, wherein the system is also configured to analyze both groups separately.

56. (currently amended) The system according to claim 52, ~~being~~ wherein the system is further adapted to detect the P-wave by a template method.

57. (currently amended) The system according to claim 52, ~~being~~ wherein the system is further adapted to detect the P-wave by a pattern recognition method.

58. (currently amended) The system according to claim 52, ~~being~~ wherein the system is further adapted to store the detected P-wave in X, Y, Z leads.

59. (currently amended) The system according to claim 52, ~~being~~ wherein the system is

further adapted to average the detected P-wave in the ~~predetermined~~ defined time ~~interval~~ period.

60. (currently amended) The system according to claim 52, ~~being~~ wherein the system is further adapted to use ~~the~~ a first averaged P-wave as a reference P-wave and to compare ~~the~~ upcoming averaged P-waves to ~~it~~ the first averaged P-wave.

61. (currently amended) The system according to claim 52, ~~being~~ wherein the system is further adapted to detect at least one loop of the P-wave.

62. (currently amended) The system according to claim 52, ~~being~~ wherein the system is further adapted to acquire ~~the~~ ECG-data from a Frank system or a 12-lead ECG-arrangement.

63. (currently amended) The system according to claim 52, being adapted to acquire the ECG-signal from ~~a~~ an independent data storage unit that has registered electrical signals of the heart ~~is independent of this invention and commercially available~~.

64. (currently amended) The system according to claim 52, ~~being~~ wherein the system is further adapted to display results of the ~~parameters~~ parameter values calculated in trend curve.

65. (currently amended) A computer program product, comprising:

a computer readable storage medium on which is stored a computer program code for a cardiac analysis, which computer program code comprises first computer instructions configured to acquire the ECG-signal, second computer instructions configured to detect at least one wave

from the ECG-signal and third computer instructions configured to calculate parameter values of said wave, wherein said wave is P-wave excluding atrial extrasystoles, whereupon the computer program code has instructions for focusing to the dynamic changes of the configuration of said P-wave, wherein said computer program code additionally comprises computer instructions configured to compare substantially every detected P-wave to a reference P-wave of the ECG signal in a defined time period.

66. (currently amended) The computer program product according to claim 65, wherein, the cardiac analysis is focused also ~~to~~ on dynamic changes of ~~the~~ a PQ-segment.